

**NATURAL AND ENVIRONMENTAL RESOURCES COMMITTEE**  
**McHenry County Administration Building**  
**667 Ware Road, Woodstock, IL 60098**

MINUTES OF WEDNESDAY, FEBRUARY 9, 2011:

Chairman McCann called the committee meeting to order at 8.35 a.m. The following members were present: Mary McCann, Chairman; Donna Kurtz; Pete Merkel; Marc Munaretto; Bob Nowak; Virginia Peschke and Kathleen Bergan Schmidt. Also in attendance: Pete Austin, County Administrator; Cassandra McKinney, Water Resource Manager; Dennis Sandquist, Kim Kolner, Cory Horton and Alicia Law, Planning & Development; Patti Nomm, Health Department; Ed Weskerna, McHenry County Soil & Water Conservation District; Nancy Schietzelt, Environmental Defenders of McHenry County; interested public and press.

Mary McCann, Chairman	
Donna Kurtz	Pete Merkel
Marc Munaretto	Bob Nowak
Virginia Peschke	Kathleen Bergan Schmidt

MINUTES: None.

PUBLIC COMMENT: None.

PRESENTATION: None.

NEW BUSINESS:

*Water Resources Action Plan (WRAP) – Subsection II Local Water Quantity and Quality:* Chairman McCann stated the committee will be reviewing the McHenry County Sensitive Aquifer Recharge Areas (SARA) map, a copy of which is in their binders and an enlarged map was provided for viewing during the meeting. Mr. Sandquist stated that pursuant to the discussion at the last committee meeting, the committee is to go through the WRAP, chapter by chapter, identify any issues, have any corrections made that are deemed appropriate, have the corrections reviewed by the committee for accuracy, and then submit it to the County Board on a chapter-by-chapter basis. Chairman McCann mentioned that the committee will be meeting with the UDO consultants on February 17, 2011 at 11:00 a.m.

Ms. McKinney joined the committee to review the SARA map. She explained that recharge is the entry of groundwater into a saturated zone. The SARA map depicts where the geology in McHenry County is able to infiltrate groundwater at a sustainable rate. The high point in the landscape is where we get the most recharge. The SARA map was created to understand where aquifer recharge took place in the County and also understanding that groundwater is limited and vulnerable to pollution. Sensitive areas are areas that rapidly transport liquids through their geologic materials to a shallow aquifer. Recharge areas are areas where water is rapidly transported through the geologic materials to the shallow aquifers. Sensitive areas on the SARA map equal good recharge and the sensitive areas are highly susceptible to aquifer contamination. 70% of the County has aquifers within 100 feet of the surface. Map Unit A shows the high potential for aquifer recharge/contamination and Map Unit B shows the moderately high potential for aquifer recharge/contamination.

The goal of the SARA map is to integrate into land use planning so we can identify and protect those areas that are susceptible to contamination and most valuable for recharging underlying aquifer systems. Mr. Sandquist mentioned that with increased density, impervious surface goes down compared to lower-density which creates more impervious surface area. Ms. McKinney mentioned that turf grass does not act as a very good infiltrative surface because water tends to sheet-flow over turf grass rather than infiltrate. Open space and native grasses promote quality infiltration. There is three times the amount of water runoff from manicured lawns/turf grass compared to runoff from natural grasses. Chairman McCann mentioned that the County Board has adopted the SARA Map as a planning tool with the 2030 Plan and the UDO consultants will use this map as a reference map. Ms. McKinney stated that we have sustainable yield that has been projected for aquifers, but there is not a uniform yield across the county because some areas take out more water than others. Some best management practices that can be put into place are water conservation, gray water reuse, and to try to keep the water cycle local. Currently our drinking water is treated at waste water treatment plants and exported out of our county. Stormwater is also treated as waste water right now. We have an urban water cycle and we need to get back to the natural water cycle.

Natural and Environmental Resources Committee

Approved: 3-9-11

There was discussion concerning farm tiles in the county's rural areas. It was questioned if there was mapping for farm tiles in rural areas so they could see how much they impact sensitive recharge areas. Mr. Weskerna mentioned that there is very little tile information in his office that they have compiled over the years. Farmers were not required to keep track of tile lines and their installation. There is very little information on the majority of the tiles in the county. Drainage districts are mapped and there are four active drainage districts in the county. His office has records of the active drainage districts, but that only covers approximately 2% of the county.

*Subsection B1) Overarching Recommendations:* Ms. McKinney mentioned that the general policy recommendation is to raise public awareness and establish development guidelines about the best practices for implementing groundwater recharge programs that balance water extraction and replacement. Members were provided a summary matrix of recommendations for implementations which provides the suggested timeline for implementation of this section. Raising public awareness will be ongoing. Establish development guidelines about the best practices for implementing groundwater recharge programs that balance water extraction and replacement is being developed and will be developed along with the UDO. The WRAP's goal is to work to preserve the quality and replenish the quantity of existing groundwater resources. Existing standards are state and Federal regulated contaminants; Consumer Confidence Report (this does not apply to the county); Source Water Assessment Summary (this is not applicable to the county); Drinking Water Report (this is not applicable to the county); county regulations for abandoned wells; and the Illinois Water Use Act of 1983.

All new wells withdrawing a rate of 100,000 gallons within a 24-hour period now have to report to the Illinois State Water Survey (ISWS). If a new well is proposed to be drilled in the county, and it will pump more than 100,000 gallons per day, there must to be a site analysis done of the proposed well to determine if it will have a negative impact on surrounding users. The new regulations states that notification be provided to the surrounding users informing them that the well is proposed pending approval that it will not have any impact after it is installed. If the ISWS deems that the well will have a negative impact, then the IL Dept. of AG can recommend a restriction on how much water can be pumped and they can reduce the amount of water taken from the well. Ms. Nomm mentioned that there is a proposed high-capacity well in the Marengo/Union area that anticipates pumping 800 gallons per minute for agricultural use. The design must include an assessment stating what the aquifer can safely provide. This proposed well can provide over 1.1 million gallons per day. It was mentioned that sod farms and golf courses use a lot of water. Chairman McCann introduced Larry Keller, a well driller. He mentioned that most high-capacity wells that he has installed range from 800 to 1,000 gallons per minute. Farmers maximize their yield and they know how much water is needed to produce their best yield. They put in drain tiles in moderately/high risk zones so they can maintain their soil moisture. They water and drain their fields at the same time to maximize their yields. Mr. Weskerna mentioned that not all irrigation in agriculture comes from wells. A lot of it will come from large ponds and rivers, such as the Kishwaukee River and Fox River. When you irrigate, the water is going back into the soil, and it is being irrigated and falling back onto the ground and some of it is re-infiltrating back into the ground. He suggests an inventory be compiled of center-pivot irrigation, not many of which are in McHenry County. We are irrigating in areas that are sandy, gravelly, and drought susceptible, many of which are located in western McHenry County. A meter placed on a center-pivot irrigation system is very expensive. Walking wheel irrigation systems are very old systems and many pump from ponds, creeks and rivers. Ms. McKinney stated that cross-connection control rules and regulations may be amendments to the plumbing code. She is working with the McHenry County Health Department and the Department of Planning and Development concerning this section. The water use reporting standards are required to submit an annual survey to the Illinois State Water Survey and a voluntary submission to the Division of Water Resources. With reference to the notification system for additional high capacity wells, the SWCD is currently responsible for the inventory of these wells. Chairman McCann mentioned that much like the 2030 Plan, this committee will forward their recommendations for the Water Resource Action Plan to the County Board section-by-section. Mr. Merkel suggested having stronger reporting of the inventory of high-capacity wells for both new and existing wells and Mr. Nowak agreed. Chairman McCann mentioned that it may be just an inventory of high-capacity wells and how much the county can regulate the inventory of these wells may be beyond the county's control. Ms. Schmidt mentioned that the notes listed on the timeline concerning the notification system for additional high-capacity wells needs to be removed since it no longer applies. Ms. Kurtz would like the final matrix be in landscape form and have the header maintained consistently throughout the document.

*McHenry County Watersheds:* Chairman McCann mentioned that the County has many watersheds. They are important for stormwater management and for water resources. Mr. Sandquist provided members with a handout entitled "Welcome

to Your Watershed!" which was prepared by the Friends of the Fox River with help from the McHenry County Defenders and funded by the McHenry County Conservation Foundation. It provides an overview of what a watershed is and how they function and how to protect them. Watersheds are the area of land from which water, when it falls in the form of precipitation, ultimately runs off to a receiving body of water (lake, river, stream, or wetland area). McHenry County has two major watersheds, those being the Fox River and the Kishwaukee River. Watersheds may be divided into smaller sub-watersheds. The handout explains how watersheds work. Members were provided with a map showing McHenry County's watersheds, along with a summary of existing county watershed plans. They are multi-function plans with water quality and water quantity and promote the quality of the water within the watersheds. Ms. McKinney mentioned that Stickney Run falls within the Sleepy Hollow watershed and Prairie View Education Center falls within the Silver Creek watershed. These two are currently undergoing the watershed planning process. These two watersheds are different than ones she has participated in the past. There is a very large emphasis on water quantity for these and they are concerned about the groundwater and aquifers. Mr. Merkel mentioned that a study was completed on McCullom Lake and Mr. Sandquist requested information concerning this study so they may update their list on watershed studies. Ms. Kurtz asked if there are some parts of a watershed plan that might be appropriate to have the same standards across the board, and does it exist. Mr. Sandquist mentioned that the SWO contains provisions that they can adopt watershed standards based on individual studies. The framework is in place and they have been going through amendments to the SWO to bring the standards that apply countywide up-to-date. The goal is to review watershed studies and where they have documented a need to develop alternative standards for regulating the development of those areas. Ms. Kurtz stated that a goal of hers was that any development in the Crystal Lake watershed would respect and follow the Crystal Lake ordinance concerning watersheds. Mr. Horton mentioned that these watershed plans touch on a place where the county does not touch on. The county regulates new development and the watershed plans are a very effective tool to obtain grant funding for existing problem areas and to deal with water quantity and quality issues that are not touched by development.

#### OLD BUSINESS:

*Agricultural Conservation Easement Commission Direction Regarding Food Council:* Chairman McCann mentioned that Ms. Kolner, Mr. Sandquist and she met with representatives from ACE and some of the people who were at the food council meeting and they are not changing the ACE mission statement. ACE is going to look at some of the issues regarding a food council, divide into groups, and decide how the information feeds into the mission of ACE. ACE has direction regarding a food council and there is no immediate need for any action from this committee. It was mentioned that people do not want this to become a government program. They are looking for places to meet and organize the structure of a food council. MCC did not attend the last meeting, but representatives attended the ACE roundtable meetings. Ms. Nomm has attended all of the meetings concerning a food council and the Health Department will be involved in this matter because of the health concerns involved.

#### REPORTS TO COMMITTEE:

*McHenry County Conservation District:* Mr. Merkel reported that the latest edition of MCC's "Landscapes" has been issued and is available online. It recaps the land acquisition done with recent bond funds which are getting down to the end. There is a board meeting next Thursday and he will request that all County Board members receive MCC's "Landscapes" via e-mail. He also reported that the Festival of the Sugar Maples will be at Coral Woods the end of February/first part of March, 2011.

*Agricultural Conservation Easement Farmland Protection Commission:* See above.

*Regional Water Planning Group:* Ms. McKinney stated that there is a meeting tomorrow for the Northwest Water Planning Unit.

*Greenways:* Chairman McCann mentioned that Greenways has now been assigned to the Planning and Development Committee. Mr. Sandquist mentioned that they had a presentation from Dennis Dreher who has been retained by the Sustainable Watershed Action Team to facilitate the development a greenways and green infrastructure plan for the county. This will be reviewed in collaboration with stakeholders from the MCCD and Soil and Water District to make sure they have the basic information gathered. Chairman McCann requested that this item be deleted from future agendas.

*Green Team:* Ms. McKinney mentioned that she attends the meetings. They are currently working on updating their goals for 2011 on ways the county can conserve more and be more green. She is working with her intern on finding ways the county can reduce water consumption at all of its facilities. Chairman McCann asked her for any ideas on ways the County Board can reduce its carbon footprint and reduce the use of energy. She requested that Ms. McKinney contact the Chairman of the Management Services Committee, Chairman Schuster, since they are updating the County Board Rules. Chairman McCann suggested that county employees receive their paycheck stubs electronically rather than a paper copy.

EXECUTIVE SESSION: None.

FUTURE TOPICS: None.

Chairman McCann stated that the Natural and Environmental Resources Committee will not meet on February 23, 2011 because they are having a special meeting on February 17, 2011 at 11:00 a.m. with the UDO consultants. She mentioned that the Planning and Development Committee will be meeting at 10:00 a.m. on February 17, 2011 with the UDO consultants.

Ms. Schietzelt joined committee members and mentioned that Mr. Sandquist and Ms. McKinney will be presenting at the Transportation Planning Workshop on February 18, 2011 at MCC from 8:00 a.m. to 3:00 p.m. The cost is \$20 which includes lunch. It is sponsored by The Delta Institute; Land Conservancy of McHenry County; Chicago Wilderness, and the Environmental Defenders of McHenry County. She will provide the information to Chairman McCann who will distribute the information. Mr. Sandquist mentioned that Jason Osborn and Walter Dittrick from MCDOT will be presenters at this workshop.

Ms. Schmidt mentioned that the Wildflower Preservation and Propagation Committee is having their Natural Landscaping seminar on February 26.

Chairman McCann mentioned that Ms. McKinney has been recognized by the Illinois Geologic Survey for advocating for 3-D mapping for water supply mapping. She was congratulated by committee members for her good work on behalf of the county.

ADJOURNMENT: Ms. Kurtz made a motion, seconded by Ms. Peschke, to adjourn the meeting at 10:05 a.m. The motion carried with all members present voting aye.

\* \* \* \* \*

**RECOMMENDED FOR BOARD ACTION/APPROVAL:**

mh